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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,078	11/13/2001	Bruno Colin	BONN-063	7937

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EXAMINER

LUDLOW, JAN M

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/936,078	COLIN, BRUNO	
	Examiner	Art Unit	
	Jan M. Ludlow	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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1. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for some of the transfer channels having this property (e.g., channel 9 in Figs 1-3, channel connecting 14 and 15 in Fig. 4, channel connecting 24 and 25 in Fig 5, and channel 32 in Fig. 5) does not reasonably provide enablement for all transfer channels as claimed passing through the center of gravity of the chambers connected, e.g., channel 10 in Fig 3, channels 20, 30 in Figs. 4-5. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with this claim.

2. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. None of the transfer channels are connected to any of the centrifugation axes taught.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of claims 12 and 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if

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only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Claims 9-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is replete with antecedence problems that render its meaning unclear—how are the two receiving compartments of line 14 related to that of line 11? Are they in addition to the first recited, or does at least one of them refer back to the first recited? Is the secondary operation in line 17 the same or in addition to that of line 8? In line 17, what does "it" refer to? In line 19, "said" should be inserted before "at least two receiving" for proper antecedence.

In claim 10, it is not clear how the transfer channel of line 4 relates to the primary and secondary channels of lines 7 and 11—the same as or in addition to? It is not clear

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how the transfer channel of line 4 is structurally related to the remaining elements. It is not clear how the receiving compartments of line 20 relate to that of line 3—the same or in addition to? In line 17, should “is” be inserted before “positioned”? In line 21, “a” should be “said” for clear antecedence.

In claim 12, “connected to” is unclear—none of the channels extend all the way to the axes taught.

Claim 13 is unclear—which transfer channels are referred to? Not all of the transfer channels have this property, as explained above. With respect to claims 11-12 and 14, “each transfer channel” has been interpreted to include both the primary and secondary channels.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Guigan 4714590.

Guigan teaches providing fluid in a calibrated cell 8 (instant initial compartment), centrifuging to drive fluid into a mixing vat 4 (instant intermediate) via capillary duct 19 (primary transfer channel) using a first rotational axis distal from the mixing vat end of the device (lower end in Fig. 2), reversing the orientation of the device relative to the axis of rotation of the centrifuge to provide a second rotational axis adjacent the mixing vat end of the device (upper end in Fig. 2), and centrifuging to drive fluid from the mixing

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chamber to a plurality of reaction vats 11-18 (receiving compartments) via a plurality of capillary ducts (second transfer channels). See, e.g., col. 1, line 30- col. 2, line 30 and Fig 2.

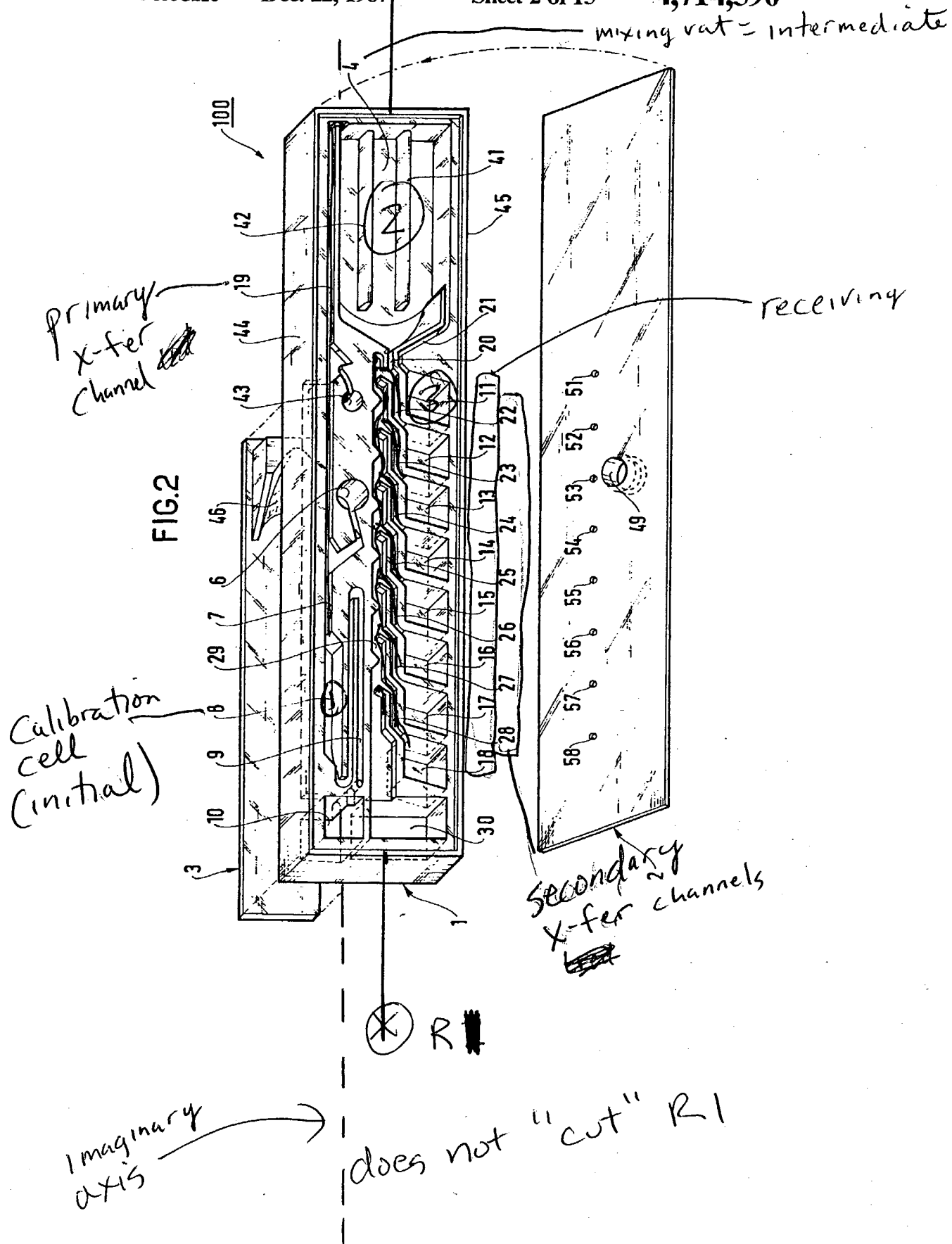
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Each of Wogoman, Combs and Holen teach centrifugal devices which are turned to provide two axes of rotation, but fail to teach or suggest the initial compartment, intermediate compartment, at least two receiving compartments, first and second transfer channels as claimed. Note that the chambers are densely packed and precisely positioned in these devices, and it is therefore unclear where a second receiving compartment and second transfer channel would be placed in the devices.

Burd teaches an initial compartment 32, first transfer channel 8, intermediate compartment 13, second transfer channels 20, 22 and plural receiving compartments 24 positioned inward of intermediate compartment 13, but only one axis of rotation 3.

8. Claims 10-11, 14-15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

9. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach or suggest the claimed structure, namely, "wherein each centrifugation axis cuts substantially perpendicularly an imaginary axis which passes through both the compartment containing the fluid and the compartment to which the fluid is to be transferred centrifugation around the axis concerned, and positioned between said compartment containing the fluid and the edge of said



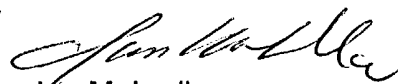
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apparatus" in that an imaginary axis through the initial compartment (calibration cell 8) and the intermediate compartment (mixing vat 4) does not cut or intersect the first rotational axis distal from the mixing vat, i.e., when the mixing vat is positioned near the periphery of the centrifuge (near the lower end of the device as seen in Figure 2). A copy of annotated Fig. 2 is attached.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jan M. Ludlow
Primary Examiner
Art Unit 1743

Jml
June 12, 2004